GenCore version 4.5

OM nucleic - nucleic search, using sw model

Run on: November 8, 2001, 10:37:20 ; Search time 244.67 Seconds
(without alignments)
15831.631 Million cell updates/sec

Title: US-09-227-881-3
Perfect score: 6169
Sequence: 1 atctttgttcagtttacctc.....cttgtgcccctccatgtcag 6169

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 730101 seqs, 313950809 residues

Total number of hits satisfying chosen parameters: 1460202

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : N_Geneseq_0601:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	6169	100.0	6169	19	AAV51368	Human TIGR upstrea
	2	6169	100.0	6169	21	AAA57486	A TIGR (trabecular
	3	5275.4	85.5	5300	21	AAA57484	A TIGR (trabecular
	4	5274.4	85.5	5299	19	AAV51361	Human TIGR promote
	5	5273.8	85.5	5300	19	AAV51362	Human TIGR promote
	6	5273.8	85.5	5300	19	AAV51363	Human TIGR promote
	7	5273.8	85.5	5300	19	AAV51365	Human TIGR promote
	8	5273.8	85.5	5300	19	AAV51366	Human TIGR promote
	9	5273.8	85.5	5300	19	AAV51367	Human TIGR promote
	10	5269.4	85.4	5271	21	AAA57511	A TIGR (trabecular
	11	5261.4	85.3	5304	19	AAV51364	Human TIGR promote
	12	5253.4	85.2	5304	21	AAA57485	A TIGR (trabecular
	13	2677.4	43.4	2800	21	AAZ37968	Human GLC1A gene e
	14	975.2	15.8	3493	19	AAV37618	Human glaucoma ass
	15	640.4	10.4	1548	19	AAV51391	Human TIGR cDNA.
	16	640.4	10.4	1548	21	AAA57509	cDNA encoding trab
	17	640.4	10.4	1890	20	AAX57606	Human TIGR/MYOC ge
	18	640.4	10.4	1999	20	AAV81910	Human trabecular m
	19	640.4	10.4	1999	20	AAV08904	TIGR protein codin
	20	640.4	10.4	1999	22	AAC87528	Human TIGR cDNA, S
	21	640.4	10.4	2000	19	AAV33484	Trabecular meshwor
	22	604.4	9.8	1512	20	AAV08905	TIGR protein codin
	23	604.4	9.8	1512	22	AAC87529	Human TIGR cDNA op
	24	604.4	9.8	1515	21	AAZ37974	Human GLC1A polype
	25	603.4	9.8	1512	19	AAV37619	Human glaucoma ass
	26	585.8	9.5	2800	21	AAZ37971	Mouse GLC1A gene e
	27	556.6	9.0	1969	17	AAT30152	Trabecular meshwor
	28	556.6	9.0	1969	19	AAV28331	Nucleotide sequenc
	29	519.6	8.4	1491	17	AAT30153	Trabecular meshwor
	30	382.8	6.2	1473	21	AAZ37975	Mouse GLC1A polype
	31	283	4.6	283	21	AAA57514	Trabecular meshwor
	32	227	3.7	227	21	AAA57515	Trabecular meshwor
	33	182.8	3.0	936	22	AAF58252	Oligonucleotide D1
	34	182.8	3.0	936	22	AAF58254	Oligonucleotide D1
	35	182.8	3.0	936	22	AAF58257	Oligonucleotide D1
	36	182.8	3.0	936	22	AAF58259	Oligonucleotide D2
	37	182.8	3.0	936	22	AAF58262	Oligonucleotide D2
	38	182.8	3.0	938	22	AAF58255	Oligonucleotide D1
c	39	182	3.0	936	22	AAF58252	Oligonucleotide D1
c	40	182	3.0	936	22	AAF58254	Oligonucleotide D1
c	41	182	3.0	936	22	AAF58257	Oligonucleotide D1
c	42	182	3.0	936	22	AAF58259	Oligonucleotide D2
c	43	182	3.0	936	22	AAF58262	Oligonucleotide D2
c	44	182	3.0	938	22	AAF58255	Oligonucleotide D1
c	45	176.4	2.9	283	15	AAQ63862	AP2 sequence obtd.

ALIGNMENTS

RESULT 1
AAV51368
ID AAV51368 standard; DNA; 6169 BP.
XX
AC AAV51368;
XX
DT 27-OCT-1998 (first entry)
XX
DE Human TIGR upstream region and exon 1 DNA.
XX
KW TIGR; trabecular meshwork induced glucocorticoid response protein; human;
KW diagnosis; glaucoma; polymorphism; steroid sensitivity; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT exon 5301..5940
FT /*tag= a
FT /number= 1
FT CDS 5337..6169
FT /*tag= b
FT /product= "TIGR"
FT /note= "partial coding sequence"
FT intron 5941..6169
FT /*tag= c
FT /number= 1
FT /note= "partial intron sequence"
XX
PN WO9832850-A1.
XX
PD 30-JUL-1998.
XX
PF 09-JAN-1998; 98WO-US00468.
XX

PR 26-SEP-1997; 97US-0938669.
PR 28-JAN-1997; 97US-0791154.
XX
PA (REGC) UNIV CALIFORNIA.
XX
PI Chen H, Chen P, Nguyen TD, Polansky JR;
XX
DR WPI; 1998-427946/36.
XX
PT Use of TIGR nucleic acid sequences - used for, e.g. developing
PT products for diagnosis, prognosis and treatment of glaucoma
XX
PS Claim 37; Fig 3; 105pp; English.
XX
CC This sequence is a trabecular meshwork induced glucocorticoid response
CC protein (TIGR) upstream region and exon 1. This DNA sequence can be used
CC in a method for diagnosing glaucoma in a patient. The method involves the
CC detection of polymorphisms whose presence is predictive of a mutation
CC affecting TIGR response in the patient and can be diagnostic of glaucoma
CC or steroid sensitivity. Base substitutions and base additions upstream of
CC and within TIGR exons can also be used to diagnose glaucoma.
XX
SQ Sequence 6169 BP; 1702 A; 1389 C; 1491 G; 1587 T; 0 other;

Query Match 100.0%; Score 6169; DB 19; Length 6169;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 6169; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT  2
AAA57486
ID   AAA57486 standard; DNA; 6169 BP.
XX
AC   AAA57486;
XX
DT   20-OCT-2000  (first entry)
XX
DE   A TIGR (trabecular meshwork inducible glucocorticoid receptor) promoter.
XX
KW   TIGR; trabecular meshwork inducible glucocorticoid receptor; promoter;
KW   glaucoma; steroid sensitivity; progressive ocular hypertension;
KW   vision loss; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
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FT   mutation        replace (4950, T)
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FT   mutation        4998
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FT   mutation        replace (5113, C)
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FT                   /note= "TIGRmt11 mutant"
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XX
PD   20-JUL-2000.
XX
PF   11-JAN-2000; 2000WO-US00559.
XX
PR   11-JAN-1999;   99US-0227881.
PR   07-MAY-1999;   99US-0306828.
XX
PA   (REGC ) UNIV CALIFORNIA.
XX
PI   Nguyen TD,  Polansky JR,  Chen P,  Chen H;
XX
DR   WPI; 2000-491060/43.
XX
PT   Diagnosis, prognosis and treatment of glaucoma, based on detecting
PT   specific polymorphisms in the promoter of the trabecular meshwork
PT   inducible glucocorticoid receptor gene -
XX
PS   Claim 37; Page 105-107; 122pp; English.
XX
CC   The present sequence represents a TIGR (trabecular meshwork inducible
CC   glucocorticoid receptor) promoter. The specification describes a method
CC   for the diagnosis, prognosis and treatment of glaucoma, based on
CC   detecting specific polymorphisms in the promoter of the TIGR gene.
CC   The method is used for diagnosis and prognosis of glaucoma (of all
CC   types), steroid sensitivity and progressive ocular hypertension that
CC   leads to loss of vision. Glaucoma can be treated by administering an
CC   agent that binds to cis-acting elements within the TIGR promoter. The
CC   TIGR promoter (or other regulatory regions) can be used to express
CC   homologous or heterologous genes, particularly for tissue-specific
CC   expression of therapeutic transgenes for treating glaucoma, also to
CC   generate transgenic animals and in screening for compounds (specific
CC   modulators) with diagnostic or therapeutic potential. Fragments of the
CC   TIGR sequence can be used as amplification primers or probes, e.g. for
CC   isolating related sequences in non-human animals.
XX
SQ   Sequence 6169 BP; 1702 A; 1389 C; 1491 G; 1587 T; 0 other;


  Query Match             100.0%;  Score 6169;  DB 21;  Length 6169;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches 6169;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db   1741 caccatgcttttgtggtaagcctccacatcgttactgaaataagagtatacataaactag 1800
Qy   1801 ttccatttggggccatctgtgtgtgtgtatagggaggagggcataccccagagactcct 1860
Db   1801 ttccatttggggccatctgtgtgtgtgtatagggaggagggcataccccagagactcct 1860
Qy   1861 tgaagccccggcagaggtttcctctccagctgggggagccctgcaagcacccggggtcc 1920
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RESULT   3
AAA57484
ID   AAA57484 standard; DNA; 5300 BP.
XX
AC   AAA57484;
XX
DT   20-OCT-2000  (first entry)
XX
DE   A TIGR (trabecular meshwork inducible glucocorticoid receptor) promoter.
XX
KW   TIGR; trabecular meshwork inducible glucocorticoid receptor; promoter;
KW   glaucoma; steroid sensitivity; progressive ocular hypertension;
KW   vision loss; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   mutation        replace (4337, G)
FT                   /*tag= a
FT                   /note= "TIGRmt1 mutant"
FT   mutation        replace (4950, T)
FT                   /*tag= b
FT                   /note= "TIGRmt2 mutant"
FT   mutation        4998
FT                   /*tag= c
FT                   /note= "GTGT added to produce TIGRmt3 mutant"
FT   mutation        replace (4256, G)
FT                   /*tag= d
FT                   /note= "TIGRmt4 mutant"
FT   mutation        replace (5113, C)
FT                   /*tag= e
FT                   /note= "TIGRmt11 mutant"
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FT                   /*tag= f
FT   TATA_signal     5230..5239
FT                   /*tag= g
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PF   11-JAN-2000; 2000WO-US00559.
XX
PR   11-JAN-1999;   99US-0227881.
PR   07-MAY-1999;   99US-0306828.
XX
PA   (REGC ) UNIV CALIFORNIA.
XX
PI   Nguyen TD,  Polansky JR,  Chen P,  Chen H;
XX
DR   WPI; 2000-491060/43.
XX
PT   Diagnosis, prognosis and treatment of glaucoma, based on detecting
PT   specific polymorphisms in the promoter of the trabecular meshwork
PT   inducible glucocorticoid receptor gene -
XX
PS   Claim 34; Fig 1A-E; 122pp; English.
XX
CC   The present sequence represents a TIGR (trabecular meshwork inducible
CC   glucocorticoid receptor) promoter, isolated from an individual
CC   without glaucoma. The specification describes a method for the diagnosis,
CC   prognosis and treatment of glaucoma, based on detecting specific
CC   polymorphisms in the promoter of the TIGR gene. The method is used for
CC   diagnosis and prognosis of glaucoma (of all types), steroid sensitivity
CC   and progressive ocular hypertension that leads to loss of vision.
CC   Glaucoma can be treated by administering an agent that binds to
CC   cis-acting elements within the TIGR promoter. The TIGR promoter (or
CC   other regulatory regions) can be used to express homologous or
CC   heterologous genes, particularly for tissue-specific expression of
CC   therapeutic transgenes for treating glaucoma, also to generate
CC   transgenic animals and in screening for compounds (specific modulators)
CC   with diagnostic or therapeutic potential. Fragments of the TIGR
CC   sequence can be used as amplification primers or probes, e.g. for
CC   isolating related sequences in non-human animals.
XX
SQ   Sequence 5300 BP; 1482 A; 1152 C; 1235 G; 1431 T; 0 other;
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  Query Match             85.5%;  Score 5275.4;  DB 21;  Length 5300;
  Best Local Similarity   99.9%;  Pred. No. 0;
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Qy  4440 actttgaaattagacctcctgctggatcttgtttttaacatattaataaaacatgtttaa 4499
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  4440 actttgaaattagacctcctgctggatcttgtttttaacatattaataaaacatgtttaa 4499
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Qy   4500 aattttgatattttgataatcatatttcattatcatttgtttccttttgtaatctatattt 4559
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Db   4500 aattttgatattttgataatcatatttcattatcatttgtttccttttgtaatctatattt 4559

Qy   4560 tatatatttgaaaacatctttctgagaagagttccccagatttcaccaatgaggttcttg 4619
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Db   4560 tatatatttgaaaacatctttctgagaagagttccccagatttcaccaatgaggttcttg 4619

Qy   4620 gcatgcacacacacagagtaagaactgatttagaggctaacattgacattggtgcctgag 4679
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   4680 atgcaagactgaaattagaaagttctcccaaagatacacagttgttttaaagctaggggt 4739
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   4740 gaggggggaaatctgccgcttctataggaatgctctccctggagcctggtagggtgctgt 4799
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Qy   4800 ccttgtgttctggctggctgttatttttctctgtccctgctacgtcttaaaggacttgtt 4859
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Qy   4860 tggatctccagttcctagcatagtgcctggcacagtgcaggttctcaatgagtttgcaga 4919
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Qy   4920 gtgaatggaaatataaactagaaatatatccttgttgaaatcagcacaccagtagtcctg 4979
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4920 gtgaatggaaatataaactagaaatatatccttgttgaaatcagcacaccagtagtcctg 4979

Qy   4980 gtgtaagtgtgtgtacgtgtgtgtgtgtgtgtgtgtgtgtgtaaaaccaggtggagat 5039
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Qy   5040 ataggaactattattggggtatgggtgcataaattgggatgttctttttaaaaagaaact 5099
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Qy   5100 ccaaacagacttctggaaggttattttctaagaatcttgctggcagcgtgaaggcaaccc 5159
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Qy   5160 ccctgtgcacagccccacccagcctcacgtggccacctctgtcttcccccatgaagggct 5219
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Qy   5220 ggctccccagtatatataaacctctctggagctcgggcatgagccagcaaggccacccat 5279
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Db   5220 ggctccccagtatatataaacctctctggagctcgggcatgagccagcaaggccacccat 5279

Qy   5280 ccaggcacctctcagcacagc 5300
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Db   5280 ccaggcacctctcagcacagc 5300
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RESULT 4
AAV51361
ID AAV51361 standard; DNA; 5299 BP.
XX
AC AAV51361;
XX
DT 27-OCT-1998 (first entry)
XX
DE Human TIGR promoter region DNA.
XX
KW TIGR; trabecular meshwork induced glucocorticoid response protein; human;
KW diagnosis; glaucoma; polymorphism; steroid sensitivity; ss.
XX
OS Homo sapiens.
XX
PN WO9832850-A1.
XX
PD 30-JUL-1998.
XX
PF 09-JAN-1998; 98WO-US00468.
XX
PR 26-SEP-1997; 97US-0938669.
PR 28-JAN-1997; 97US-0791154.
XX
PA (REGC) UNIV CALIFORNIA.
XX
PI Chen H, Chen P, Nguyen TD, Polansky JR;
XX
DR WPI; 1998-427946/36.
XX
PT Use of TIGR nucleic acid sequences - used for, e.g. developing
PT products for diagnosis, prognosis and treatment of glaucoma
XX
PS Claim 34; Fig 1; 105pp; English.
XX
CC This sequence is a trabecular meshwork induced glucocorticoid response
CC protein (TIGR) promoter region which is used in a method for diagnosing
CC glaucoma in a patient. The method involves the detection of polymorphisms
CC whose presence is predictive of a mutation affecting TIGR response in the
CC patient and can be diagnostic of glaucoma or steroid sensitivity. Base
CC substitutions and base additions upstream of and within TIGR exons can
CC also be used to diagnose glaucoma.
XX
SQ Sequence 5299 BP; 1482 A; 1151 C; 1235 G; 1431 T; 0 other;

Query Match 85.5%; Score 5274.4; DB 19; Length 5299;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 5297; Conservative 0; Mismatches 1; Indels 2; Gaps 2;

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Qy      1 atctttgttcagtttacctcagggctattatgaaatgaaatgagataaccaatgtgaaag 60
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Qy     61 tcctataaactgtatagcctccattcggatgtatgtctttggcaggatgataaagaatca 120
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Qy    121 ggaagaaggagtatccacgttagccaagtgtccaggctgtgtctgctcttattttagtga 180
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Qy    181 cagatgttgctcctgacagaagctattcttcaggaaacatcacatccaatatggtaaatc 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    181 cagatgttgctcctgacagaagctattcttcaggaaacatcacatccaatatggtaaatc 240

Qy    241 catcaaacaggagctaagaaacaggaatgagatgggcacttgcccaaggaaaaatgccag 300
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    241 catcaaacaggagctaagaaacaggaatgagatgggcacttgcccaaggaaaaatgccag 300

Qy    301 gagagcaaataatgatgaaaaataaacttttccctttgtttttaatttcaggaaaaaatg 360
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    301 gagagcaaataatgatgaaaaataaacttttccctttgtttttaatttcaggaaaaaatg 360

Qy    361 atgaggaccaaaatcaatgaataaggaaaacagctcagaaaaaagatgtttccaaattgg 420
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    361 atgaggaccaaaatcaatgaataaggaaaacagctcagaaaaaagatgtttccaaattgg 420

Qy    421 taattaagtatttgttccttgggaagagacctccatgtgagcttgatgggaaaatgggaa 480
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy    481 aaacgtcaaaagcatgatctgatcagatcccaaagtggattattattttaaaaaccagat 540
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    481 aaacgtcaaaagcatgatctgatcagatcccaaagtggattattattttaaaaaccagat 540

Qy    541 ggcatcactctggggaggcaagttcaggaaggtcatgttagcaaaggacataacaataac 600
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy    601 agcaaaatcaaaattccgcaaatgcaggaggaaaatggggactgggaaagctttcataac 660
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Qy    661 agtgattaggcagttgaccatgttcgcaacacctccccgtctataccagggaacacaaaa 720
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Qy    721 attgactgggctaagcctggactttcaagggaaatatgaaaaactgagagcaaaacaaaa 780
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Db    721 attgactgggctaagcctggactttcaagggaaatatgaaaaactgagagcaaaacaaaa 780

Qy    781 gacatggttaaaaggcaaccagaacattgtgagccttcaaagcagcagtgcccctcagca 840
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Qy    841 gggaccctgaggcatttgccttaggaaggccagttttcttaaggaatcttaagaaactc 900
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy    901 ttgaaagatcatgaattttaaccattttaagtataaaacaaatatgcgatgcataatcag 960
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Qy    961 tttagacatgggtcccaattttataaagtcaggcatacaaggataacgtgtcccagctcc 1020
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   1021 ggataggtcagaaatcattagaaatcactgtgtccccatcctaacttttcagaatgatc 1080
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   1081 tgtcatagccctcacacacaggcccgatgtgtctgacctacaaccacatctacaacccaa 1140
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1081 tgtcatagccctcacacacaggcccgatgtgtctgacctacaaccacatctacaacccaa 1140

Qy   1141 gtgcctcaaccattgttaacgtgtcatctcagtaggtcccattacaaatgccacctcccc 1200
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1141 gtgcctcaaccattgttaacgtgtcatctcagtaggtcccattacaaatgccacctcccc 1200

Qy   1201 tgtgcagcccatcccgctccacaggaagtctccccactctagacttctgcatcacgatgt 1260
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Qy   1261 tacagccagaagctccgtgagggtgagggtctgtgtcttacacctacctgtatgctctac 1320
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Qy   1381 cgcgtagctgggactacaggcgcacgcccggctaatttttgtattgttagtagagatggg 1440
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Qy   1441 gtttcaccatattagcccggctggtcttgaactcctgacctcaggtgatccacccacctc 1500
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Qy   1501 agcctcctaaagtgctgggattacaggcatgagtcaccgcgcccggccaagggtcagtgt 1560
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Qy   1561 ttaataaggaataacttgaatggtttactaaaccaacagggaaacagacaaaagctgtga 1620
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Qy   1621 taatttcagggattcttgggatggggaatggtgccatgagctgcctgcctagtcccagac 1680
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   1681 cactggtcctcatcactttcttccctcatcctcattttcaggctaagttaccatttttatt 1740
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Qy   1741 caccatgcttttgtggtaagcctccacatcgttactgaaataagagtatacataaactag 1800
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   1801 ttccatttggggccatctgtgtgtgtgtatagggaggagggcataccccagagactcct 1860
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   2041 tattgagtacttatatctgccagacaccagagacaaaatggtgagcaaagcagtcactgc 2100
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Qy   2101 cctaccttcgtggaggtgacagtttctcatggaagacgtgcagaagaaaattaatagcca 2160
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Qy   2161 gccaacttaaacccagtgctgaaagaaaggaaataaacaccatcttgaagaattgtgcgc 2220
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Qy   2461 ctcagagggaaaggggcctccacgtccaggagaattccaggaggtggggactgcagggag 2520
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Qy   2521 tggggacgctggggctgagcgggtgctgaaaggcaggaaggtgaaaagggcaaggctgaa 2580
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Qy   2701 ataaagtcagctgttaaaattccagggtgtgcatgggttttccttcacgaaggcctttat 2760
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Qy   2761 ttaatgggaatataggaagcgagctcatttcctaggccgttaattcacggaagaagtgac 2820
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Qy   2881 tgcaagacggtcgaaaaccttggaatcaggagactcggttttctttctggttctgccatt 2940
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Qy   2941 ggttggctgtgcgaccgtgggcaagtgtctctccttccctgggccatagtcttctctgct 3000
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   3001 ataaagacccttgcagctctcgtgttctgtgaacacttccctgtgattctctgtgagggg 3060
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Qy   3121 ggacaggaaggcaggcagaagctgggtgctccatcagtcctcactgatcacgtcagactc 3180
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Qy   3181 caggaccgagagccacaatgcttcaggaaagctcaatgaacccaacagccacattttcct 3240
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Qy   3241 tccctaagcatagacaatggcatttgccaataaccaaaaagaatgcagagactaactggt 3300
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Qy   3301 ggtagcttttgcctggcattcaaaaactgggccagagcaagtggaaaatgccagagattg 3360
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Qy   3361 ttaaacttttcaccctgaccagcaccccacgcagctcagcagtgactgctgacagcacgg 3420
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Qy   3481 acagattcattcaagggcagtgggaattgaccacagggattatagtccacgtgatcctgg 3540
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Qy   3541 gttctaggaggcagggctatattgtgggggggaaaaaatcagttcaagggaagtcgggaga 3600
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Qy   3661 gtagtaactgaggctgtaagattacttagtttctccttattaggaactctttttctctgt 3720
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Qy   3721 ggagttagcagcacaagggcaatcccgtttctttttaacaggaagaaaacattcctaagag 3780
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Qy   3781 taaagccaaacagattcaagcctaggtcttgctgactatatgattggtttttgaaaaat 3840
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Qy   3841 catttcagcgatgtttactatctgattcagaaaatgagactagtacccttggtcagctg 3900
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Qy   3960 aagaatagaatctttagagcaaactgtgtttctccacatctggaggtgagtctgccaggg 4019
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Qy   4860 tggatctccagttcctagcatagtgcctggcacagtgcaggttctcaatgagtttgcaga 4919
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Qy   5220 ggctccccagtatatataaacctctctggagctcgggcatgagccagcaaggccacccat 5279
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Db   5280 ccaggcacctctcagcacag 5299
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RESULT 5
AAV51362
ID AAV51362 standard; DNA; 5300 BP.
XX
AC AAV51362;
XX
DT 27-OCT-1998 (first entry)
XX
DE Human TIGR promoter mutant TIGRmt1 DNA.
XX
KW TIGR; trabecular meshwork induced glucocorticoid response protein; human;
KW diagnosis; glaucoma; polymorphism; steroid sensitivity; mutant; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT mutation 4337
FT /*tag= a
FT /note= "Wild type C is replaced by G"
XX
PN WO9832850-A1.
XX
PD 30-JUL-1998.
XX
PF 09-JAN-1998; 98WO-US00468.
XX
PR 26-SEP-1997; 97US-0938669.
PR 28-JAN-1997; 97US-0791154.
XX
PA (REGC) UNIV CALIFORNIA.
XX
PI Chen H, Chen P, Nguyen TD, Polansky JR;
XX
DR WPI; 1998-427946/36.
XX
PT Use of TIGR nucleic acid sequences - used for, e.g. developing
PT products for diagnosis, prognosis and treatment of glaucoma
XX
PS Disclosure; Fig 2; 105pp; English.
XX
CC This sequence is a trabecular meshwork induced glucocorticoid response
CC protein (TIGR) promoter mutant, TIGRmt1, which is used in a method for
CC diagnosing glaucoma in a patient. The method involves the detection of
CC polymorphisms whose presence is predictive of a mutation affecting TIGR
CC response in the patient and can be diagnostic of glaucoma or steroid
CC sensitivity. Base substitutions and base additions upstream of and within
CC TIGR exons can also be used to diagnose glaucoma.
XX
SQ Sequence 5300 BP; 1482 A; 1151 C; 1236 G; 1431 T; 0 other;

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  Query Match            85.5%;  Score 5273.8;  DB 19;  Length 5300;
  Best Local Similarity  99.9%;  Pred. No. 0;
  Matches 5297;  Conservative    0;  Mismatches    2;  Indels    2;  Gaps    2;

Qy      1 atctttgttcagtttacctcagggctattatgaaatgaaatgagataaccaatgtgaaag 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy     61 tcctataaactgtatagcctccattcggatgtatgtctttggcaggatgataaagaatca 120
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Qy    181 cagatgttgctcctgacagaagctattcttcaggaaacatcacatccaatatggtaaatc 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy    241 catcaaacaggagctaagaaacaggaatgagatgggcacttgcccaaggaaaaatgccag 300
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Qy    301 gagagcaaataatgatgaaaaataaacttttccctttgtttttaatttcaggaaaaaatg 360
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Qy    361 atgaggaccaaaatcaatgaataaggaaaacagctcagaaaaaagatgtttccaaattgg 420
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Qy    481 aaacgtcaaaagcatgatctgatcagatcccaaagtggattattatttttaaaaaccagat 540
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Qy    601 agcaaaatcaaaattccgcaaatgcaggaggaaaatggggactgggaaagctttcataac 660
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Qy    781 gacatggttaaaaggcaaccagaacattgtgagccttcaaagcagcagtgcccctcagca 840
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Qy    841 gggaccctgaggcatttgcctttaggaaggccagttttcttaaggaatcttaagaaactc 900
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Qy    901 ttgaaagatcatgaattttaaccattttaagtataaaacaaatatgcgatgcataatcag 960
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Qy   1141 gtgcctcaaccattgttaacgtgtcatctcagtaggtcccattacaaatgccacctcccc 1200
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Qy   1801 ttccatttggggccatctgtgtgtgtgtataggggaggagggcataccccagagactcct 1860
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   2161 gccaacttaaacccagtgctgaaagaaaggaaataaacaccatcttgaagaattgtgcgc 2220
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Qy   2221 agcatcccttaacaaggccacctccctagcgccccctgctgcctccatcgtgcccggagg 2280
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Qy   2281 cccccaagcccgagtcttccaagcctcctcctccatcagtcacagcgctgcagctggcct 2340
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Qy   2341 gcctcgcttcccgtgaatcgtcctggtgcatctgagctggagactccttggctccaggct 2400
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Qy   2401 ccagaaaggaaatggagagggaaactagtctaacggagaatctggaggggacagtgtttc 2460
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Qy   2461 ctcagagggaaaggggcctccacgtccaggagaattccaggaggtggggactgcagggag 2520
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Qy   2521 tggggacgctggggctgagcgggtgctgaaaggcaggaaggtgaaaagggcaaggctgaa 2580
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Qy   2941 ggttggctgtgcgaccgtgggcaagtgtctctccttccctgggccatagtcttctctgct 3000
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Qy   3121 ggacaggaaggcaggcagaagctgggtgctccatcagtcctcactgatcacgtcagactc 3180
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Db   5280 ccaggcacctctcagcacagc 5300
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RESULT   6
AAV51363
ID   AAV51363 standard; DNA; 5300 BP.
XX
AC   AAV51363;
XX
DT   27-OCT-1998  (first entry)
XX
DE   Human TIGR promoter mutant TIGRmt2 DNA.
XX
KW   TIGR; trabecular meshwork induced glucocorticoid response protein; human;
KW   diagnosis; glaucoma; polymorphism; steroid sensitivity; mutant; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   mutation        4950
FT                   /*tag= a
FT                   /note= "Wild-type C is replaced with T"
XX
PN   WO9832850-A1.
XX
PD   30-JUL-1998.
XX
PF   09-JAN-1998;   98WO-US00468.
XX
PR   26-SEP-1997;   97US-0938669.
PR   28-JAN-1997;   97US-0791154.
XX
PA   (REGC ) UNIV CALIFORNIA.
XX
PI   Chen H,  Chen P,  Nguyen TD,  Polansky JR;
XX
DR   WPI; 1998-427946/36.
XX
PT   Use of TIGR nucleic acid sequences - used for, e.g. developing
PT   products for diagnosis, prognosis and treatment of glaucoma
XX
PS   Disclosure; Fig 2; 105pp; English.
XX
CC   This sequence is a trabecular meshwork induced glucocorticoid response
CC   protein (TIGR) promoter mutant, TIGRmt2, which is used in a method for
CC   diagnosing glaucoma in a patient. The method involves the detection of
CC   polymorphisms whose presence is predictive of a mutation affecting TIGR
CC   response in the patient and can be diagnostic of glaucoma or steroid
CC   sensitivity. Base substitutions and base additions upstream of and within
CC   TIGR exons can also be used to diagnose glaucoma.
XX
SQ   Sequence 5300 BP; 1482 A; 1151 C; 1235 G; 1432 T; 0 other;

  Query Match             85.5%;  Score 5273.8;  DB 19;  Length 5300;
  Best Local Similarity   99.9%;  Pred. No. 0;
  Matches 5297;  Conservative    0;  Mismatches    2;  Indels    2;  Gaps    2;

Qy      1 atctttgttcagtttacctcagggctattatgaaatgaaatgagataaccaatgtgaaag 60
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Qy     61 tcctataaactgtatagcctccattcggatgtatgtctttggcaggatgataaagaatca 120
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Qy    121 ggaagaaggagtatccacgttagccaagtgtccaggctgtgtctgctcttattttagtga 180
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Qy    181 cagatgttgctcctgacagaagctattcttcaggaaacatcacatccaatatggtaaatc 240
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Qy    241 catcaaacaggagctaagaaacaggaatgagatgggcacttgcccaaggaaaaatgccag 300
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Qy    301 gagagcaaataatgatgaaaaataaacttttccctttgtttttaatttcaggaaaaaatg 360
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Qy    361 atgaggaccaaaatcaatgaataaggaaaacagctcagaaaaaagatgtttccaaattgg 420
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Qy    421 taattaagtatttgttccttgggaagagacctccatgtgagcttgatgggaaaatgggaa 480
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Qy    481 aaacgtcaaaagcatgatctgatcagatcccaaagtggattattatttttaaaaaccagat 540
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Qy   1081 tgtcatagccctcacacacaggcccgatgtgtctgacctacaaccacatctacaacccaa 1140
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   1141 gtgcctcaaccattgttaacgtgtcatctcagtaggtcccattacaaatgccacctcccc 1200
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Qy  1681 cactggtcctcatcactttcttccctcatcctcattttcaggctaagttaccattttatt 1740
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Qy   3661 gtagtaactgaggctgtaagattacttagtttctccttattaggaactctttttctctgt 3720
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Qy   4860 tggatctccagttcctagcatagtgcctggcacagtgcaggttctcaatgagtttgcaga 4919
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RESULT 7
AAV51365
ID AAV51365 standard; DNA; 5300 BP.
XX
AC AAV51365;
XX
DT 27-OCT-1998 (first entry)
XX
DE Human TIGR promoter mutant TIGRmt4 DNA.
XX
KW TIGR; trabecular meshwork induced glucocorticoid response protein; human;
KW diagnosis; glaucoma; polymorphism; steroid sensitivity; mutant; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT mutation 4256
FT /*tag= a
FT /note= "Wild-type A is replaced by G"
XX
PN WO9832850-A1.
XX
PD 30-JUL-1998.

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PF   09-JAN-1998;   98WO-US00468.
XX
PR   26-SEP-1997;   97US-0938669.
PR   28-JAN-1997;   97US-0791154.
XX
PA   (REGC ) UNIV CALIFORNIA.
XX
PI   Chen H,  Chen P,  Nguyen TD,  Polansky JR;
XX
DR   WPI; 1998-427946/36.
XX
PT   Use of TIGR nucleic acid sequences - used for, e.g. developing
PT   products for diagnosis, prognosis and treatment of glaucoma
XX
PS   Disclosure; Fig 2; 105pp; English.
XX
CC   This sequence is a trabecular meshwork induced glucocorticoid response
CC   protein (TIGR) promoter mutant, TIGRmt4, which is used in a method for
CC   diagnosing glaucoma in a patient. The method involves the detection of
CC   polymorphisms whose presence is predictive of a mutation affecting TIGR
CC   response in the patient and can be diagnostic of glaucoma or steroid
CC   sensitivity. Base substitutions and base additions upstream of and within
CC   TIGR exons can also be used to diagnose glaucoma.
XX
SQ   Sequence 5300 BP; 1481 A; 1152 C; 1236 G; 1431 T; 0 other;

  Query Match             85.5%;  Score 5273.8;  DB 19;  Length 5300;
  Best Local Similarity   99.9%;  Pred. No. 0;
  Matches 5297;  Conservative    0;  Mismatches    2;  Indels    2;  Gaps    2;

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Qy      61 tcctataaactgtatagcctccattcggatgtatgtctttggcaggatgataaagaatca 120
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Qy     121 ggaagaaggagtatccacgttagccaagtgtccaggctgtgtctgctcttattttagtga 180
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Qy     181 cagatgttgctcctgacagaagctattcttcaggaaacatcacatccaatatggtaaatc 240
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Qy     301 gagagcaaataatgatgaaaaataaacttttccctttgtttttaatttcaggaaaaaatg 360
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Qy     481 aaacgtcaaaagcatgatctgatcagatcccaaagtggattattattttaaaaaccagat 540
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Qy     601 agcaaaatcaaaattccgcaaatgcaggaggaaaatggggactgggaaagctttcataac 660
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Qy     661 agtgattaggcagttgaccatgttcgcaacacctccccgtctataccagggaacacaaaa 720
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Qy     721 attgactgggctaagcctggactttcaagggaaatatgaaaaactgagagcaaaacaaaa 780
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Qy     781 gacatggttaaaaggcaaccagaacattgtgagccttcaaagcagcagtgcccctcagca 840
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RESULT 8
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XX
DT 27-OCT-1998 (first entry)
XX
DE Human TIGR promoter mutant TIGRmt5 DNA.
XX
KW TIGR; trabecular meshwork induced glucocorticoid response protein; human;
KW diagnosis; glaucoma; polymorphism; steroid sensitivity; mutant; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT mutation 4262
FT /*tag= a
FT /note= "Wild-type G is replaced with A"
XX
PN WO9832850-A1.
XX
PD 30-JUL-1998.
XX
PF 09-JAN-1998; 98WO-US00468.
XX
PR 26-SEP-1997; 97US-0938669.
PR 28-JAN-1997; 97US-0791154.
XX
PA (REGC) UNIV CALIFORNIA.
XX
PI Chen H, Chen P, Nguyen TD, Polansky JR;
XX
DR WPI; 1998-427946/36.
XX
PT Use of TIGR nucleic acid sequences - used for, e.g. developing
PT products for diagnosis, prognosis and treatment of glaucoma
XX
PS Disclosure; Fig 2; 105pp; English.
XX
CC This sequence is a trabecular meshwork induced glucocorticoid response
CC protein (TIGR) promoter mutant, TIGRmt5, which is used in a method for
CC diagnosing glaucoma in a patient. The method involves the detection of
CC polymorphisms whose presence is predictive of a mutation affecting TIGR
CC response in the patient and can be diagnostic of glaucoma or steroid
CC sensitivity. Base substitutions and base additions upstream of and within
CC TIGR exons can also be used to diagnose glaucoma.
XX

SQ Sequence 5300 BP; 1483 A; 1152 C; 1234 G; 1431 T; 0 other;

Query Match 85.5%; Score 5273.8; DB 19; Length 5300;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 5297; Conservative 0; Mismatches 2; Indels 2; Gaps 2;

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Db   4140 tttattggctattgccatttgctttttgtttttttctctttgggtttattaatgtaaagca 4199

Qy   4200 gggattattaacctacagtccagaaagcctgtgaatttgaatgaggaaaaaattacattt 4259
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4200 gggattattaacctacagtccagaaagcctgtgaatttgaatgaggaaaaaattacattt 4259

Qy   4260 ttgtttttaccaccttctaactaaatttaacattttattccattgcgaatagagccataa 4319
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          || ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4260 ttatttttaccaccttctaactaaatttaacattttattccattgcgaatagagccataa 4319

Qy   4320 actcaaagtggtaataacagtacctgtgattttgtcattaccaatagaaatcacagacat 4379
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4320 actcaaagtggtaataacagtacctgtgattttgtcattaccaatagaaatcacagacat 4379

Qy   4380 tttatactatattacagttgttgcagatacgttgtaagtgaaatatttatactcaaaact 4439
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4380 tttatactatattacagttgttgcagatacgttgtaagtgaaatatttatactcaaaact 4439

Qy   4440 actttgaaattagacctcctgctggatcttgtttttaacatattaataaaacatgtttaa 4499
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4440 actttgaaattagacctcctgctggatcttgtttttaacatattaataaaacatgtttaa 4499

Qy   4500 aattttgatattttgataatcatatttcattatcatttgtttcctttgtaatctatattt 4559
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4500 aattttgatattttgataatcatatttcattatcatttgtttcctttgtaatctatattt 4559

Qy   4560 tatatatttgaaaacatctttctgagaagagttccccagatttcaccaatgaggttcttg 4619
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   4620 gcatgcacacacacagagtaagaactgatttagaggctaacattgacattggtgcctgag 4679
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Db   4620 gcatgcacacacacagagtaagaactgatttagaggctaacattgacattggtgcctgag 4679

Qy   4680 atgcaagactgaaattagaaagttctcccaaagatacacagttgttttaaagctaggggt 4739
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Db   4680 atgcaagactgaaattagaaagttctcccaaagatacacagttgttttaaagctaggggt 4739

Qy   4740 gaggggggaaatctgccgcttctataggaatgctctccctggagcctggtagggtgctgt 4799
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Qy   4800 ccttgtgttctggctggctgttatttttctctgtccctgctacgtcttaaaggacttgtt 4859
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Qy   4860 tggatctccagttcctagcatagtgcctggcacagtgcaggttctcaatgagtttgcaga 4919
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4860 tggatctccagttcctagcatagtgcctggcacagtgcaggttctcaatgagtttgcaga 4919

Qy   4920 gtgaatggaaatataaactagaaatatatccttgttgaaatcagcacaccagtagtcctg 4979
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4920 gtgaatggaaatataaactagaaatatatccttgttgaaatcagcacaccagtagtcctg 4979

Qy   4980 gtgtaagtgtgtgtacgtgtgtgtgtgtgtgtgtgtgtgtgtaaaaccaggtggagat 5039
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4980 gtgtaagtgtgtgtacgtgtgtgtgtgtgtgtgtgtgtgtaaaaccaggtggagat 5039

Qy   5040 ataggaactattattggggtatgggtgcataaattgggatgttctttttaaaaagaaact 5099
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Db   5040 ataggaactattattggggtatgggtgcataaattgggatgttctttttaaaaagaaact 5099

Qy   5100 ccaaacagacttctggaaggttatttttctaagaatcttgctggcagcgtgaaggcaaccc 5159
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Qy   5160 ccctgtgcacagccccacccagcctcacgtggccacctctgtcttcccccatgaagggct 5219
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Qy   5220 ggctccccagtatatataaacctctctggagctcgggcatgagccagcaaggccacccat 5279
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Db   5220 ggctccccagtatatataaacctctctggagctcgggcatgagccagcaaggccacccat 5279

Qy   5280 ccaggcacctctcagcacagc 5300
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Db   5280 ccaggcacctctcagcacagc 5300

RESULT 9
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AAV51367
ID   AAV51367 standard; DNA; 5300 BP.
XX
AC   AAV51367;
XX
DT   27-OCT-1998 (first entry)
XX
DE   Human TIGR promoter variant TIGRsv1 DNA.
XX
KW   TIGR; trabecular meshwork induced glucocorticoid response protein; human;
KW   diagnosis; glaucoma; polymorphism; steroid sensitivity; mutant; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   mutation        4406
FT                   /*tag= a
FT                   /note= "Wild-type A is replaced by G"
XX
PN   WO9832850-A1.
XX
PD   30-JUL-1998.
XX
PF   09-JAN-1998;   98WO-US00468.
XX
PR   26-SEP-1997;   97US-0938669.
PR   28-JAN-1997;   97US-0791154.
XX
PA   (REGC ) UNIV CALIFORNIA.
XX
PI   Chen H, Chen P, Nguyen TD, Polansky JR;
XX
DR   WPI; 1998-427946/36.
XX
PT   Use of TIGR nucleic acid sequences - used for, e.g. developing
PT   products for diagnosis, prognosis and treatment of glaucoma
XX
PS   Disclosure; Fig 2; 105pp; English.
XX
CC   This sequence is a trabecular meshwork induced glucocorticoid response
CC   protein (TIGR) promoter variant, TIGRsv1, which is used in a method for
CC   diagnosing glaucoma in a patient. The method involves the detection of
CC   polymorphisms whose presence is predictive of a mutation affecting TIGR
CC   response in the patient and can be diagnostic of glaucoma or steroid
CC   sensitivity. Base substitutions and base additions upstream of and within
CC   TIGR exons can also be used to diagnose glaucoma.
XX
SQ   Sequence 5300 BP; 1481 A; 1152 C; 1236 G; 1431 T; 0 other;
```

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  Query Match           85.5%;  Score 5273.8;  DB 19;  Length 5300;
  Best Local Similarity   99.9%;  Pred. No. 0;
  Matches 5297;  Conservative    0;  Mismatches    2;  Indels    2;  Gaps    2;

Qy       1 atctttgttcagtttacctcagggctattatgaaatgaaatgagataaccaatgtgaaag 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1 atctttgttcagtttacctcagggctattatgaaatgaaatgagataaccaatgtgaaag 60

Qy      61 tcctataaactgtatagcctccattcggatgtatgtctttggcaggatgataaagaatca 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 tcctataaactgtatagcctccattcggatgtatgtctttggcaggatgataaagaatca 120

Qy     121 ggaagaaggagtatccacgttagccaagtgtccaggctgtgtctgctcttattttagtga 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     121 ggaagaaggagtatccacgttagccaagtgtccaggctgtgtctgctcttattttagtga 180

Qy     181 cagatgttgctcctgacagaagctattcttcaggaaacatcacatccaatatggtaaatc 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     181 cagatgttgctcctgacagaagctattcttcaggaaacatcacatccaatatggtaaatc 240

Qy     241 catcaaacaggagctaagaaacaggaatgagatgggcacttgcccaaggaaaaatgccag 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db    241 catcaaacaggagctaagaaacaggaatgagatgggcacttgcccaaggaaaaatgccag 300

Qy    301 gagagcaaataatgatgaaaaataaacttttccctttgtttttaatttcaggaaaaaatg 360
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    301 gagagcaaataatgatgaaaaataaacttttccctttgtttttaatttcaggaaaaaatg 360

Qy    361 atgaggaccaaaatcaatgaataaggaaaacagctcagaaaaaagatgtttccaaattgg 420
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    361 atgaggaccaaaatcaatgaataaggaaaacagctcagaaaaaagatgtttccaaattgg 420

Qy    421 taattaagtatttgttccttgggaagagacctccatgtgagcttgatgggaaaatgggaa 480
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    421 taattaagtatttgttccttgggaagagacctccatgtgagcttgatgggaaaatgggaa 480

Qy    481 aaacgtcaaaagcatgatctgatcagatcccaaagtggattattattttaaaaaccagat 540
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    481 aaacgtcaaaagcatgatctgatcagatcccaaagtggattattattttaaaaaccagat 540

Qy    541 ggcatcactctggggaggcaagttcaggaaggtcatgttagcaaaggacataacaataac 600
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    541 ggcatcactctggggaggcaagttcaggaaggtcatgttagcaaaggacataacaataac 600

Qy    601 agcaaaatcaaaattccgcaaatgcaggaggaaaatggggactgggaaagctttcataac 660
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    601 agcaaaatcaaaattccgcaaatgcaggaggaaaatggggactgggaaagctttcataac 660

Qy    661 agtgattaggcagttgaccatgttcgcaacacctccccgtctataccagggaacacaaaa 720
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy    721 attgactgggctaagcctggactttcaagggaaatatgaaaaactgagagcaaaacaaaa 780
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    721 attgactgggctaagcctggactttcaagggaaatatgaaaaactgagagcaaaacaaaa 780

Qy    781 gacatggttaaaaggcaaccagaacattgtgagccttcaaagcagcagtgcccctcagca 840
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    781 gacatggttaaaaggcaaccagaacattgtgagccttcaaagcagcagtgcccctcagca 840

Qy    841 gggaccctgaggcatttgcctttaggaaggccagttttcttaaggaatcttaagaaactc 900
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    841 gggaccctgaggcatttgcctttaggaaggccagttttcttaaggaatcttaagaaactc 900

Qy    901 ttgaaagatcatgaattttaaccattttaagtataaaaacaaatatgcgatgcataatcag 960
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Qy    961 tttagacatgggtcccaattttataaagtcaggcatacaaggataacgtgtcccagctcc 1020
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Qy   1021 ggataggtcagaaatcattagaaatcactgtgtccccatcctaacttttcagaatgatc 1080
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1021 ggataggtcagaaatcattagaaatcactgtgtccccatcctaacttttcagaatgatc 1080

Qy   1081 tgtcatagccctcacacacaggcccgatgtgtctgacctacaaccacatctacaacccaa 1140
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1081 tgtcatagccctcacacacaggcccgatgtgtctgacctacaaccacatctacaacccaa 1140

Qy   1141 gtgcctcaaccattgttaacgtgtcatctcagtaggtcccattacaaatgccacctcccc 1200
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Db   1141 gtgcctcaaccattgttaacgtgtcatctcagtaggtcccattacaaatgccacctcccc 1200

Qy   1201 tgtgcagcccatcccgctccacaggaagtctccccactctagacttctgcatcacgatgt 1260
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Qy   1441 gtttcaccatattagcccggctggtcttgaactcctgacctcaggtgatccacccacctc 1500
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   1501 agcctcctaaagtgctgggattacaggcatgagtcaccgcgcccggccaagggtcagtgt 1560
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Qy   1681 cactggtcctcatcactttcttccctcatcctcattttcaggctaagttaccattttatt 1740
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Qy   1741 caccatgcttttgtggtaagcctccacatcgttactgaaataagagtatacataaactag 1800
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   1801 ttccatttggggccatctgtgtgtgtgtataggggaggagggcataccccagagactcct 1860
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   1861 tgaagcccccggcagaggtttcctctccagctgggggagccctgcaagcacccggggtcc 1920
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Qy   1921 tgggtgtcctgagcaacctgccagcccgtgccactggttgttttgttatcactctctagg 1980
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Qy   1981 gacctgttgctttctatttctgtgtgactcgttcattcatccaggcattcattgacaatt 2040
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Qy   2041 tattgagtacttatatctgccagacaccagagacaaaatggtgagcaaagcagtcactgc 2100
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   2101 cctaccttcgtggaggtgacagtttctcatggaagacgtgcagaagaaaattaatagcca 2160
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Qy   2161 gccaacttaaacccagtgctgaaagaaaggaaataaacaccatcttgaagaattgtgcgc 2220
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   2221 agcatcccttaacaaggccacctccctagcgccccctgctgcctccatcgtgcccggagg 2280
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Qy   2341 gcctcgcttcccgtgaatcgtcctggtgcatctgagctggagactccttggctccaggct 2400
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Qy   2401 ccagaaaggaaatggagagggaaactagtctaacggagaatctggaggggacagtgtttc 2460
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Qy   2461 ctcagagggaaaggggcctccacgtccaggagaattccaggaggtggggactgcagggag 2520
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Qy   2521 tggggacgctggggctgagcgggtgctgaaaggcaggaaggtgaaaagggcaaggctgaa 2580
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2521 tggggacgctggggctgagcgggtgctgaaaggcaggaaggtgaaaagggcaaggctgaa 2580

Qy   2581 gctgcccagatgttcagtgttgttcacggggctgggagttttccgttgcttcctgtgagc 2640
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Qy   2641 ctttttatcttttctctgcttggaggagaagaagtctatttcatgaagggatgcagtttc 2700
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2641 ctttttatcttttctctgcttggaggagaagaagtctatttcatgaagggatgcagtttc 2700

Qy   2701 ataaagtcagctgttaaaattccagggtgtgcatgggttttccttcacgaaggcctttat 2760
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Qy   2761 ttaatgggaatataggaagcgagctcatttcctaggccgttaattcacggaagaagtgac 2820
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Qy   2821 tggagtcttttctttcatgtcttctgggcaactactcagccctgtggtggacttggctta 2880
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Qy   2881 tgcaagacggtcgaaaaccttggaatcaggagactcggttttctttctggttctgccatt 2940
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RESULT 10
AAA57511
ID   AAA57511 standard; DNA; 5271 BP.
XX
AC   AAA57511;
XX
DT   20-OCT-2000  (first entry)
XX
DE   A TIGR (trabecular meshwork inducible glucocorticoid receptor) promoter.
XX
KW   TIGR; trabecular meshwork inducible glucocorticoid receptor; promoter;
KW   glaucoma; steroid sensitivity; progressive ocular hypertension;
KW   vision loss; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   mutation        replace (4337, G)
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FT                   /note= "TIGRmt1 mutant"
FT   mutation        replace (4950, T)
FT                   /*tag=  b
FT                   /note= "TIGRmt2 mutant"
FT   mutation        4998
FT                   /*tag=  c
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FT   mutation        replace (5113, C)
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FT                   /note= "TIGRmt11 mutant"
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XX
PD   20-JUL-2000.
XX
PF   11-JAN-2000; 2000WO-US00559.
XX
PR   11-JAN-1999;   99US-0227881.
PR   07-MAY-1999;   99US-0306828.
XX
PA   (REGC ) UNIV CALIFORNIA.
XX
PI   Nguyen TD,  Polansky JR,  Chen P,  Chen H;
XX
DR   WPI; 2000-491060/43.
XX
PT   Diagnosis, prognosis and treatment of glaucoma, based on detecting
PT   specific polymorphisms in the promoter of the trabecular meshwork
PT   inducible glucocorticoid receptor gene -
XX
PS   Claim 79; Page 117-119; 122pp; English.
XX
CC   The present sequence represents a TIGR (trabecular meshwork inducible
CC   glucocorticoid receptor) promoter, isolated from an individual
CC   without glaucoma. The specification describes a method for the diagnosis,
CC   prognosis and treatment of glaucoma, based on detecting specific
CC   polymorphisms in the promoter of the TIGR gene. The method is used for
CC   diagnosis and prognosis of glaucoma (of all types), steroid sensitivity
CC   and progressive ocular hypertension that leads to loss of vision.
CC   Glaucoma can be treated by administering an agent that binds to
CC   cis-acting elements within the TIGR promoter. The TIGR promoter (or
CC   other regulatory regions) can be used to express homologous or
CC   heterologous genes, particularly for tissue-specific expression of
CC   therapeutic transgenes for treating glaucoma, also to generate
CC   transgenic animals and in screening for compounds (specific modulators)
CC   with diagnostic or therapeutic potential. Fragments of the TIGR
CC   sequence can be used as amplification primers or probes, e.g. for
CC   isolating related sequences in non-human animals.
XX
SQ   Sequence 5271 BP; 1476 A; 1138 C; 1231 G; 1426 T; 0 other;


  Query Match             85.4%;  Score 5269.4;  DB 21;  Length 5271;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches 5270;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

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Qy   1501 agcctcctaaagtgctgggattacaggcatgagtcaccgcgcccggccaagggtcagtgt 1560
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Qy   1561 ttaataaggaataacttgaatggtttactaaaccaacagggaaacagacaaaagctgtga 1620
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Qy   1621 taatttcagggattcttgggatggggaatggtgccatgagctgcctgcctagtcccagac 1680
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Qy   1681 cactggtcctcatcactttcttccctcatcctcattttcaggctaagttaccattttatt 1740
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Qy   1741 caccatgcttttgtggtaagcctccacatcgttactgaaataagagtatacataaactag 1800
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Qy   1921 tgggtgtcctgagcaacctgccagcccgtgccactggttgttttgttatcactctctagg 1980
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Qy   2041 tattgagtacttatatctgccagacaccagagacaaaatggtgagcaaagcagtcactgc 2100
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Qy   2101 cctaccttcgtggaggtgacagtttctcatggaagacgtgcagaagaaaattaatagcca 2160
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RESULT 11
AAV51364
ID AAV51364 standard; DNA; 5304 BP.
XX
AC AAV51364;
XX
DT 27-OCT-1998 (first entry)
XX
DE Human TIGR promoter mutant TIGRmt3 DNA.
XX
KW TIGR; trabecular meshwork induced glucocorticoid response protein; human;
KW diagnosis; glaucoma; polymorphism; steroid sensitivity; mutant; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT mutation 4997..5002
FT /*tag= a
FT /note= "Wild-type TG is replaced with TGTGTG"
XX
PN WO9832850-A1.
XX
PD 30-JUL-1998.
XX
PF 09-JAN-1998; 98WO-US00468.
XX
PR 26-SEP-1997; 97US-0938669.
PR 28-JAN-1997; 97US-0791154.
XX
PA (REGC) UNIV CALIFORNIA.
XX
PI Chen H, Chen P, Nguyen TD, Polansky JR;
XX
DR WPI; 1998-427946/36.
XX
PT Use of TIGR nucleic acid sequences - used for, e.g. developing
PT products for diagnosis, prognosis and treatment of glaucoma
XX
PS Disclosure; Fig 2; 105pp; English.
XX
CC This sequence is a trabecular meshwork induced glucocorticoid response
CC protein (TIGR) promoter mutant, TIGRmt3, which is used in a method for
CC diagnosing glaucoma in a patient. The method involves the detection of
CC polymorphisms whose presence is predictive of a mutation affecting TIGR
CC response in the patient and can be diagnostic of glaucoma or steroid
CC sensitivity. Base substitutions and base additions upstream of and within
CC TIGR exons can also be used to diagnose glaucoma.
XX
SQ Sequence 5304 BP; 1482 A; 1152 C; 1237 G; 1433 T; 0 other;

Query Match 85.3%; Score 5261.4; DB 19; Length 5304;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 5298; Conservative 0; Mismatches 1; Indels 6; Gaps 3;

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Qy     61 tcctataaactgtatagcctccattcggatgtatgtctttggcaggatgataaagaatca 120
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Db    421 taattaagtatttgttccttgggaagagacctccatgtgagcttgatgggaaaatgggaa 480

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Qy    661 agtgattaggcagttgaccatgttcgcaacacctccccgtctataccagggaacacaaaa 720
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Qy    721 attgactgggctaagcctggactttcaagggaaatatgaaaaactgagagcaaaacaaaa 780
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RESULT 12
AAA57485
ID AAA57485 standard; DNA; 5304 BP.
XX
AC AAA57485;
XX
DT 20-OCT-2000 (first entry)
XX
DE A TIGR (trabecular meshwork inducible glucocorticoid receptor) promoter.
XX
KW TIGR; trabecular meshwork inducible glucocorticoid receptor; promoter;
KW glaucoma; steroid sensitivity; progressive ocular hypertension;
KW vision loss; ss.
XX
OS Homo sapiens.
XX

FH	Key	Location/Qualifiers
FT	mutation	replace (4337, G)
FT		/*tag= a
FT		/note= "TIGRmt1 mutant"
FT	mutation	replace (4950, T)
FT		/*tag= b
FT		/note= "TIGRmt2 mutant"
FT	mutation	4998
FT		/*tag= c
FT		/note= "GTGT added to produce TIGRmt3 mutant"
FT	mutation	replace (4256, G)
FT		/*tag= d
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FT	mutation	replace (5117, C)
FT		/*tag= e
FT		/note= "TIGRmt11 mutant"

XX
PN WO200042220-A1.
XX
PD 20-JUL-2000.
XX
PF 11-JAN-2000; 2000WO-US00559.
XX
PR 11-JAN-1999; 99US-0227881.
PR 07-MAY-1999; 99US-0306828.
XX
PA (REGC) UNIV CALIFORNIA.
XX
PI Nguyen TD, Polansky JR, Chen P, Chen H;
XX
DR WPI; 2000-491060/43.
XX
PT Diagnosis, prognosis and treatment of glaucoma, based on detecting
PT specific polymorphisms in the promoter of the trabecular meshwork
PT inducible glucocorticoid receptor gene -
XX
79; Fig 2A-E; 122pp; English.

sent sequence represents a sequence varaint of the TIGR
lar meshwork inducible glucocorticoid receptor) promoter.
tification describes a method for the diagnosis, prognosis
ment of glaucoma, based on detecting specific polymorphisms
in the promoter of the TIGR gene. The method is used for diagnosis
and prognosis of glaucoma (of all types), steroid sensitivity
and progressive ocular hypertension that leads to loss of vision.
Glaucoma can be treated by administering an agent that binds to
cis-acting elements within the TIGR promoter. The TIGR promoter (or
other regulatory regions) can be used to express homologous or
heterologous genes, particularly for tissue-specific expression of
therapeutic transgenes for treating glaucoma, also to generate
transgenic animals and in screening for compounds (specific modulators)
with diagnostic or therapeutic potential. Fragments of the TIGR
sequence can be used as amplification primers or probes, e.g. for
isolating related sequences in non-human animals.
XX
SQ Sequence 5304 BP; 1481 A; 1150 C; 1239 G; 1434 T; 0 other;

Query Match 85.2%; Score 5253.4; DB 21; Length 5304;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 5293; Conservative 0; Mismatches 6; Indels 6; Gaps 3;

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Qy     61 tcctataaactgtatagcctccattcggatgtatgtctttggcaggatgataaagaatca 120
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Qy   3181 caggaccgagagccacaatgcttcaggaaagctcaatgaacccaacagccacattttcct 3240
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Qy   4140 tttattggctattgccatttgctttttgttttttctctttgggtttattaatgtaaagca 4199
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Qy   4200 gggattattaacctacagtccagaaagcctgtgaatttgaatgaggaaaaaattacattt 4259
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Db   4200 gggattattaacctacagtccagaaagcctgtgaatttgaatgaggaaaaaattacgttt 4259

Qy   4260 ttgtttttaccaccttctaactaaatttaacattttattccattgcgaatagagccataa 4319
          || ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4260 ttatttttaccaccttctaactaaatttaacattttattccattgcgaatagagccataa 4319

Qy   4320 actcaaagtggtaataacagtacctgtgattttgtcattaccaatagaaatcacagacat 4379
          |||||||||||||||| ||||||||||||||||||||||||||||||||||||||||||||
Db   4320 actcaaagtggtaataagagtacctgtgattttgtcattaccaatagaaatcacagacat 4379

Qy   4380 tttatactatattacagttgttgcagatacgttgtaagtgaaatatttatactcaaaact 4439
          |||||||||||||||||||||||| ||||||||||||||||||||||||||||||||||||
Db   4380 tttatactatattacagttgttgcaggtacgttgtaagtgaaatatttatactcaaaact 4439

Qy   4440 actttgaaattagacctcctgctggatcttgtttttaacatattaataaaacatgtttaa 4499
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4440 actttgaaattagacctcctgctggatcttgtttttaacatattaataaaacatgtttaa 4499

Qy   4500 aattttgatattttgataatcatatttcattatcatttgtttcctttgtaatctatattt 4559
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4500 aattttgatattttgataatcatatttcattatcatttgtttcctttgtaatctatattt 4559

Qy   4560 tatatatttgaaaacatctttctgagaagagttccccagatttcaccaatgaggttcttg 4619
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4560 tatatatttgaaaacatctttctgagaagagttccccagatttcaccaatgaggttcttg 4619

Qy   4620 gcatgcacacacacagagtaagaactgatttagaggctaacattgacattggtgcctgag 4679
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Qy   4680 atgcaagactgaaattagaaagttctcccaaagatacacagttgttttaaagctaggggt 4739
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Qy   4740 gaggggggaaatctgccgcttctataggaatgctctccctggagcctggtagggtgctgt 4799
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   4740 gaggggggaaatctgccgcttctataggaatgctctccctggagcctggtagggtgctgt 4799

Qy   4800 ccttgtgttctggctggctgttatttttctctgtccctgctacgtcttaaaggacttgtt 4859
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Qy   4860 tggatctccagttcctagcatagtgcctggcacagtgcaggttctcaatgagtttgcaga 4919
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Qy   4920 gtgaatggaaatataaactagaaatatatccttgttgaaatcagcacaccagtagtcctg 4979
          |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||
Db   4920 gtgaatggaaatataaactagaaatatatctttgttgaaatcagcacaccagtagtcctg 4979

Qy   4980 gtgtaagtgtgtgtac----gtgtgtgtgtgtgtgtgtgtgtgtgtgtgtaaaaccaggtgg 5035
          ||||||||||||||    ||||||||||||||||||||||||||||||||||||||||||
Db   4980 gtgtaagtgtgtgtacgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtaaaaccaggtgg 5039

Qy   5036 agatataggaactattattggggtatgggtgcataaattgggatgttctttttaaaaaga 5095
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   5040 agatataggaactattattggggtatgggtgcataaattgggatgttctttttaaaaaga 5099

Qy   5096 aactccaaacagacttctggaaggttattttctaagaatcttgctggcagcgtgaaggca 5155
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   5100 aactccaaacagacttctggaaggttattttctaagaatcttgctggcagcgtgaaggca 5159

Qy   5156 acccccctgtgcacagccccacccagcctcacgtggccacctctgtcttcccccatgaag 5215
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Db   5160 acccccctgtgcacagccccacccagcctcacgtggccacctctgtcttcccccatgaag 5219

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Db   5220 ggctggctccccagtatatataaacctctctggagctcgggcatgagccagcaaggccac 5279

Qy   5276 ccatccaggcacctctcagcacagc 5300
Db   5280 ccatccaggcacctctcagcacagc 5304


RESULT 13
AAZ37968
ID   AAZ37968 standard; DNA; 2800 BP.
XX
AC   AAZ37968;
XX
DT   07-FEB-2000  (first entry)
XX
DE   Human GLC1A gene exon 1 and flanking sequences.
XX
KW   Glaucoma; PCR amplification; primary open wide angle glaucoma;
KW   GLC1A gene; exon; human; ss.
XX
OS   Homo sapiens.
XX
PN   WO9951779-A2.
XX
PD   14-OCT-1999.
XX
PF   07-APR-1999;   99WO-US07671.
XX
PR   07-APR-1998;   98US-0056285.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
XX
PI   Stone EM,  Sheffield VC,  Alward WLM,  Fingert J;
XX
DR   WPI; 2000-022956/02.
XX
PT   Determination of a predisposition to glaucoma by analysing mutations in
PT   the GLC1A gene  -
XX
PS   Disclosure; Fig 1A; 137pp; English.
XX
CC   The invention relates to a method for the determination of a
CC   predisposition to glaucoma. The method comprises amplifying a GLC1A gene
CC   with a primer pair selected from the sequences shown in AAZ37981-Z38008.
CC   The primers are used to determine whether a subject has or has the
CC   potential to develop primary open wide angle glaucoma. The present
CC   sequence represents the human GLC1A gene exon 1 and flanking sequences.
XX
SQ   Sequence 2800 BP; 781 A; 588 C; 673 G; 758 T; 0 other;


  Query Match             43.4%;  Score 2677.4;  DB 21;  Length 2800;
  Best Local Similarity   99.7%;  Pred. No. 0;
  Matches 2736;  Conservative    0;  Mismatches    1;  Indels    8;  Gaps    5;

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Db      1 agcgcaggggaggagaag-aaaagagagggatagtgtatgagcaagaaagacagattcat 59

Qy   3491 tcaagggcagtgggaattgaccacagggattatagtccacgtgatcctgggttctaggag 3550
Db     60 tcaagggcagtgggaattgaccacagggattatagtccacgtgatcctgggttctaggag 119

Qy   3551 gcagggctatattgtgggggaaaaaatcagttcaagggaagtcgggagacctgatttct 3610
Db    120 gcagggctatattgtgggggaaaaaatcagttcaagggaagtcgggagacctgatttct 179

Qy   3611 aatactatatttttcctttacaagctgagtaattctgagcaagtcacaaggtagtaactg 3670
Db    180 aatactatatttttcctttacaagctgagtaattctgagcaagtcacaaggtagtaactg 239

Qy   3671 aggctgtaagattacttagtttctccttattaggaactctttttctctgtggagttagca 3730
Db    240 aggctgtaagattacttagtttctccttattaggaactctttttctctgtggagttagca 299

Qy   3731 gcacaagggcaatcccgtttctttttaacaggaagaaaacattcctaagagtaaagccaaa 3790
Db    300 gcacaagggcaatcccgtttctttttaacaggaagaaaacattcctaagagtaaagccaaa 359

Qy   3791 cagattcaagcctaggtcttgctgactatatgattggttttttgaaaaatcatttcagcg 3850
Db    360 cagattcaagcctaggtcttgctgactatatgattggttttttgaaaaatcatttcagcg 419

Qy   3851 atgtttactatctgattcagaaaatgagactagtacccttttggtcagctgtaaacaaaca 3910
Db    420 atgtttactatctgattcagaaaatgagactagtacccttttggtcagctgtaaacaaaca 479

Qy   3911 cccagttgtaaatgtctcaagttcaggcttaactgcagaaccaatcaaa-aagaatagaa 3969
Db    480 cccatttgtaaatgtctcaagttcaggcttaactgcagaaccaatcaaataagaatagaa 539

Qy   3970 tctttagagcaaactgtgtttctccacatctggaggtgagtctgccagggcagtttggaa 4029
Db    540 tctttagagcaaactgtgtttctccac-tctggaggtgagtctgccagggcagtttggaa 598

Qy   4030 atatttacttcacaagtattgacactgttgttggtattaacaacataaagttgctcaaag 4089
Db    599 atatttacttcacaagtattgacactgttgttggtattaacaacataaagttgctcaaag 658

Qy   4090 gcaatcattatttcaagtggcttaaagttacttctgacagttttggtatatttattggct 4149
Db    659 gcaatcattatttcaagtggcttaaagttacttctgacagttttggtatatttattggct 718

Qy   4150 attgccatttgctttttgttttttctctttgggtttattaatgtaaagcagggattatta 4209
Db    719 attgccatttgctttttgttttttctctttgggtttattaatgtaaagcagggattatta 778

Qy   4210 acctacagtccagaaagcctgtgaatttgaatgaggaaaaaattacatttttgtttttac 4269
Db    779 acctacagtccagaaagcctgtgaatttgaatgaggaaaaaattacatttttgtttttac 838

Qy   4270 caccttctaactaaatttaacatttttattccattgcgaatagagccataaactcaaagtg 4329
Db    839 caccttctaactaaatttaacatttttattccattgcgaatagagccataaactcaaagtg 898

Qy   4330 gtaataacagtacctgtgattttgtcattaccaatagaaatcacagacattttatactat.4389
Db    899 gtaataacagtacctgtgattttgtcattaccaatagaaatcacagacattttatactat 958

Qy   4390 attacagttgttgcagatacgttgtaagtgaaatatttatactcaaaactactttgaaat 4449
Db    959 attacagttgttgcagatacgttgtaagtgaaatatttatactcaaaactactttgaaat 1018

Qy   4450 tagacctcctgctggatcttgtttttaacatattaataaaacatgtttaaaattttgata 4509
Db   1019 tagacctcctgctggatcttgtttttaacatattaataaaacatgtttaaaattttgata 1078

Qy   4510 ttttgataatcatatttcattatcatttgtttcctttgtaatctatattttatatatttg 4569
Db   1079 ttttgataatcatatttcattatcatttgtttcctttgtaatctatattttatatatttg 1138

Qy   4570 aaaacatctttctgagaagagttccccagatttcaccaatgaggttcttggcatgcacac 4629
Db   1139 aaaacatctttctgagaagagttccccagatttcaccaatgaggttcttggcatgcacac 1198

Qy   4630 acacagagtaagaactgatttagaggctaacattgacattggtgcctgagatgcaagact 4689
Db   1199 acacagagtaagaactgatttagaggctaacattgacattggtgcctgagatgcaagact 1258

Qy   4690 gaaattagaaagttctcccaaagatacacagttgttttaaagctaggggtgaggggggaa 4749
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Db   1259 gaaattagaaagttctcccaaagatacacagttgttttaaagctaggggtgaggggggaa 1318

Qy   4750 atctgccgcttctataggaatgctctccctggagcctggtagggtgctgtccttgtgttc 4809
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Qy   4810 tggctggctgttatttttctctgtccctgctacgtcttaaaggacttgtttggatctcca 4869
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Db   1379 tggctggctgttatttttctctgtccctgctacgtcttaaaggacttgtttggatctcca 1438

Qy   4870 gttcctagcatagtgcctggcacagtgcaggttctcaatgagtttgcagagtgaatggaa 4929
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Db   1439 gttcctagcatagtgcctggcacagtgcaggttctcaatgagtttgcagagtgaatggaa 1498

Qy   4930 atataaactagaaatatatccttgttgaaatcagcacaccagtagtcctggtgtaagtgt 4989
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1499 atataaactagaaatatatccttgttgaaatcagcacaccagtagtcctggtgtaagtgt 1558

Qy   4990 gtgtacgtgtgtgtgtgtgtgtgtgtgtgtgtgtaaaaccaggtggagatataggaacta 5049
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Qy   5050 ttattggggtatgggtgcataaattgggatgttctttttaaaaagaaactccaaacagac 5109
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Db   1619 ttattggggtatgggtgcataaattgggatgttctttttaaaaagaaactccaaacagac 1678

Qy   5110 ttctggaaggttattttctaagaatcttgctggcagcgtgaaggcaacccccctgtgcac 5169
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Db   1679 ttctggaaggttattttctaagaatcttgctggcagcgtgaaggcaacccccctgtgcac 1738

Qy   5170 agccccacccagcctcacgtggccacctctgtcttcccccatgaagggctggctccccag 5229
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Qy   5230 tatatataaacctctctggagctcgggcatgagccagcaaggccacccatccaggcacct 5289
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Db   1799 tatatataaacctctctggagctcgggcatgagccagcaaggccacccatccaggcacct 1858

Qy   5290 ctcagcacagcagagctttccagaggaagcctcaccaagcctctgcaatgaggttcttct 5349
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Qy   5350 gtgcacgttgctgcagctttgggcctgagatgccagctgtccagctgctgcttctggcct 5409
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Qy   5410 gcctggtgtgggatgtgggggccaggacagctcagctcaggaaggccaatgaccagagtg 5469
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Qy   5470 gccgatgccagtataccttcagtgtggccagtcccaatgaatccagctgcccagagcaga 5529
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Qy   5530 gccaggccatgtcagtcatccataacttacagagagacagcagcacccaacgcttagacc 5589
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Qy   5830 atctggccaggaggttggaaagcagcagccaggaggtagcaaggctgagaaggggccagt 5889
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Qy   5950 cagagtgggggactctgagttcagcaggtgatatggctcgtagtgacctgctacaggcg 6009
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Qy   6010 ctccaggcctc----cctgccctttctcctagagactgcacagctagcacaagacagatg 6065
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Qy   6066 aattaaggaaagcaca-cgatcaccttcaagtattactagtaatttagctcctgagagct 6124
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RESULT  14
AAV37618
ID   AAV37618 standard; DNA; 3493 BP.
XX
AC   AAV37618;
XX
DT   14-SEP-1998  (first entry)
XX
DE   Human glaucoma associated GLC1A genomic sequence.
XX
KW   Glaucoma; GLC1A; treatment; mutant; juvenile open angle glaucoma;
KW   JOAG; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
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FT                   /*tag= b
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FT                   /note= "contains introns"
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FT                   /*tag= g
FT                   /number= 3
FT   3'UTR           3020..3493
FT                   /*tag= h
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PN   WO9820131-A1.
XX
PD   14-MAY-1998.
XX
PF   07-NOV-1997;   97WO-US20702.
XX
PR   21-MAR-1997;   97US-0822999.
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PR   08-NOV-1996;   96US-0748479.
PR   30-JAN-1997;   97US-0791347.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
XX
PI   Alward WLM,  Sheffield V,  Stone EM;
XX
DR   WPI; 1998-286947/25.
DR   P-PSDB; AAW60670.
XX
PT   New isolated gene associated with glaucoma - used to develop
PT   products to determine whether a subject has, or is at risk of,
PT   developing glaucoma, and for treating or preventing glaucoma
XX
PS   Claim 1; Fig 1A-B; 116pp; English.
XX
CC   This represents the genomic sequence of the human GLC1A gene which is
CC   associated with juvenile open angle glaucoma (JOAG). The gene can be used
CC   for the development of assays for identifying molecules that modulate
CC   (agonists or antagonists) the bioactivity of a functional or mutant gene
CC   or protein. Modulators may be an antibody, protein, peptide or
CC   peptidomimetic or a nucleic acid, e.g. antisense sequence, ribozyme or
CC   triple helix forming nucleic acid. These molecules can be administered to
CC   a subject with glaucoma or at risk for developing glaucoma to prevent or
CC   reduce the severity of the condition. Derivatives of GLC1A gene can be
CC   used to detect lesions of the GLC1A gene which are indicative of glaucoma
CC   or predisposition to glaucoma.
XX
SQ   Sequence 3493 BP; 929 A; 840 C; 840 G; 871 T; 13 other;


  Query Match             15.8%;  Score 975.2;  DB 19;  Length 3493;
  Best Local Similarity   98.4%;  Pred. No. 2.9e-216;
  Matches 1002;  Conservative    0;  Mismatches   11;  Indels    5;  Gaps    2;

Qy   5157 ccccccctgtgcacagccccacccagcctcacgtggccacctctgtcttcccccatgaagg 5216
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Qy   5217 gctggctccccagtatatataaacctctctggagctcgggcatgagccagcaaggccacc 5276
           |||||||||||||||||||||| | | ||||| ||||||||||||||||||||||||
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Qy   5277 catccaggcacctctcagcacagcagagctttccagaggaagcctcaccaagcctctgca 5336
           ||| |||||||||| ||||||||||||||||||||||||||||||||||||||||||||
Db    121 cattcaggcacctttcagcacagcagagctttccagaggaagcctcaccaagcctctgca 180

Qy   5337 atgaggttcttctgtgcacgttgctgcagctttgggcctgagatgccagctgtccagctg 5396
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Qy   5397 ctgcttctggcctgcctggtgtgggatgtgggggccaggacagctcagctcaggaaggcc 5456
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   5457 aatgaccagagtggccgatgccagtataccttcagtgtggccagtcccaatgaatccagc 5516
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Qy   5697 ctgggcaccctgaggcgggagcgggaccagctggaaacccaaaccagagagttggagact 5756
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RESULT  15
AAV51391
ID   AAV51391 standard; cDNA; 1548 BP.
XX
AC   AAV51391;
XX
DT   27-OCT-1998  (first entry)
XX
DE   Human TIGR cDNA.
XX
KW   TIGR; trabecular meshwork induced glucocorticoid response protein; human;
KW   diagnosis; glaucoma; polymorphism; steroid sensitivity; ss.
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OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             37..1548
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FT                   /product= TIGR
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PN   WO9832850-A1.
XX
PD   30-JUL-1998.
XX
PF   09-JAN-1998;   98WO-US00468.
XX
PR   26-SEP-1997;   97US-0938669.
PR   28-JAN-1997;   97US-0791154.
XX
PA   (REGC ) UNIV CALIFORNIA.
XX
PI   Chen H,  Chen P,  Nguyen TD,  Polansky JR;
XX
DR   WPI; 1998-427946/36.
DR   P-PSDB; AAW64669.
XX
PT   Use of TIGR nucleic acid sequences - used for, e.g. developing
PT   products for diagnosis, prognosis and treatment of glaucoma
XX
PS   Claim 48; Fig 7; 105pp; English.
XX
CC   This cDNA sequence encodes a novel human trabecular meshwork induced
```

CC glucocorticoid response protein (TIGR) which is used in a method for
CC diagnosing glaucoma in a patient. The method involves the detection of
CC polymorphisms whose presence is predictive of a mutation affecting TIGR
CC response in the patient and can be diagnostic of glaucoma or steroid
CC sensitivity. Base substitutions and base additions upstream of and within
CC TIGR exons can also be used to diagnose glaucoma.
XX
SQ Sequence 1548 BP; 402 A; 418 C; 431 G; 297 T; 0 other;

Query Match 10.4%; Score 640.4; DB 19; Length 1548;
Best Local Similarity 99.8%; Pred. No. 9.1e-139;
Matches 641; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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